

What is claimed is:

1. A method of dry etching an insulating film composed of an organic SOG film by a mixed gas containing at least  $C_4F_8$  and  $O_2$ , comprising the following step of:  
setting a flow rate of  $O_2$  to 50% or less of a flow rate of  $C_4F_8+O_2$ .
2. The method according to claim 1, wherein said dry etching is done to form a contact hole.
3. The method according to claim 1, wherein said organic SOG film is formed by adding an alkyl group to oxide silicon.
4. A method of dry etching an insulating film composed of an organic SOG film by a mixed gas containing at least  $CF_4$ ,  $CHF_3$  and  $N_2$ , comprising the following step of:  
setting a flow rate of  $N_2$  to above 10% and below 80% of a flow rate of  $CF_4+CHF_3+N_2$ .
5. The method according to claim 4, wherein said dry etching is done to form a contact hole.
6. The method according to claim 4, wherein said organic SOG film is formed by adding an alkyl group to oxide silicon.
7. A dry etching method, comprising the following step of:  
forming contact holes in an insulating film composed of an organic SOG film, and  
wherein plasma treatment for removing a resist pattern used to form said each contact hole is done by using  $O_2+N_2H_2$ .
8. The dry etching method according to claim 7, wherein said organic SOG film is formed by adding an alkyl group to oxide silicon.
9. A dry etching method, comprising the following step of:  
forming contact holes in an insulating film composed of an organic SOG film, and  
wherein plasma treatment for removing a resist pattern used to form said each contact hole is done by using  $O_2+N_2+H_2$ .

10. The dry etching method according to claim 9, wherein said organic SOG film is formed by adding an alkyl group to oxide silicon.

11. A dry etching method, comprising the following step of:  
forming contact hole in an insulating film composed of an organic SOG film; and  
wherein plasma treatment for removing a resist pattern used to form said each contact hole is done by mixing an oxygen gas with a gas for nitriding the organic SOG film.

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